

ITEM NO. 9

ERRATA SHEET 2 FOR TENTATIVE RESOLUTION NO. R9-2005-0036 TO AMEND THE WATER QUALITY CONTROL PLAN FOR THE SAN DIEGO REGION (BASIN PLAN) TO INCORPORATE TOTAL MAXIMUM DAILY LOADS FOR NITROGEN AND PHOSPHORUS IN RAINBOW CREEK.

ERRATA CHANGES FOR TENTATIVE RESOLUTION NO. R9-2005-0036 AND ATTACHMENT A

FEBRUARY 9, 2005

THE UNDERLINE AREAS DENOTE ADDITIONS AND THE STRIKEOUT DENOTE
DELETIONS.

1. **Modify the first sentence of Tentative Resolution No. R9-2005-0036, Draft Basin Plan Amendment, Finding 12 as follows:**

IMPLEMENTATION ACTIONS: The necessary actions to implement the TMDL are described in the *Basin Plan Amendment and Technical Report for Total Nitrogen and Total Phosphorus Total Maximum Daily Loads For Rainbow Creek, dated ~~October 15, 2004~~ January 27, 2005.*

2. **Modify Attachment A To Tentative Resolution No. R9-2005-0036, Draft Basin Plan Amendment, Page 5, Margin of Safety as follows:**

Margin of Safety

Explicit and implicit margins of safety (MOS) were considered for these TMDLs. An explicit MOS of 5% is reserved to account for uncertainties and calculated to be 83 kg/year total nitrogen and 8 kg/year total phosphorus. An implicit MOS has been incorporated through numerous conservative assumptions in the analysis.

3. **Replace Attachment A To Tentative Resolution No. R9-2005-0036, Draft Basin Plan Amendment, Section A2, Page 8, Regional Board Actions as follows:**

County of San Diego – Issue Water Code ~~Section 13225~~ Governmental Water Quality Investigation Request Order for Nutrient Reduction and Management Plan

The Regional Board shall, ~~within 90 days of USEPA approval of the Basin Plan Amendment,~~ issue an an Order under CWC §13225 ~~Order directing~~ requiring the County of San Diego to investigate excessive levels of nutrients in Rainbow Creek and feasible management strategies to reduce nutrient loading in Rainbow Creek. A ~~prepare and submit a~~ Nutrient Reduction and Management Plan (NRMP) for the Rainbow Creek watershed containing the

elements described below in Section C, County of San Diego Nutrient Reduction Management Plan Elements would satisfy such an Order. The County may submit alternative or additional elements equivalent to those described in Section C that would result in equivalent protection from, or prevention of, nutrient discharges to Rainbow Creek.

4. **Replace Attachment A To Tentative Resolution No. R9-2005-0036, Draft Basin Plan Amendment, Section A4, Page 9, Regional Board Actions as follows:**

County of San Diego – Issue Water Code Section 13225 Order Governmental Water Quality Investigation Request for Groundwater Investigation and Characterization Report

The Regional Board shall ~~could~~ within 90 days of USEPA approval of the Basin Plan Amendment, issue an Order under CWC §13225 ~~Order~~ directing the County of San Diego to prepare and submit a workplan and report ~~containing the elements described below in Section B, County of San Diego Actions, Items 3; Submit Groundwater Investigation and Characterization Workplan and Item 4; Groundwater Investigation and Characterization Report.~~

5. **Replace Attachment A To Tentative Resolution No. R9-2005-0036, Draft Basin Plan Amendment, Section B.1., Page 11, County of San Diego Actions as follows:**

Control MS4 Discharges to Rainbow Creek

For nutrient discharges in to or from Municipal Separate Storm Sewer Systems (MS4) within the Rainbow Creek watershed ~~subject to the County of San Diego's MS4 NPDES Storm Water Permit~~, the County has an existing obligation under the NPDES requirements for MS4 in San Diego County ⁷ ~~shall to~~ require increasingly stringent best management practices, pursuant to the iterative process described in Receiving Water Limitation C.2.a.⁸ of the MS4 Requirements permit, to reduce nutrients discharges in the Rainbow Creek watershed to the maximum extent practicable and restore compliance with the nutrient water quality objective.

6. **Replace Attachment A To Tentative Resolution No. R9-2005-0036, Draft Basin Plan Amendment, Section B.2, Page 11, County of San Diego Actions as follows:**

Submit and Implement Nutrient Reduction and Management Plan (NRMP)

The County of San Diego shall, upon ~~direction~~ request by the Regional Board pursuant to a CWC §13225 ~~Order~~, prepare and submit a NRMP for the Rainbow Creek watershed, consistent with the SWRCB NPS Implementation and Enforcement Policy and containing the elements described in Section C, County of San Diego Nutrient Reduction and Management Plan. The County may submit alternative or additional elements equivalent to those described in Section C, that would result in equivalent protection from, or prevention of, nutrient discharges to Rainbow Creek.

7. **Replace Attachment A To Tentative Resolution No. R9-2005-0036, Draft Basin Plan Amendment, Section B.3, Page 11 and 12, County of San Diego Actions as follows:**

Submit and Implement Groundwater Investigation and Characterization Workplan

The County of San Diego shall, upon ~~direction~~^{request} by the Regional Board pursuant to a CWC §13225-Order, undertake an investigation of groundwater quality within the Rainbow Creek watershed, and shall prepare and submit a workplan designed to guide the collection of information to produce the technical report described in Item 4, Groundwater Investigation and Characterization ~~Report~~ below. The workplan shall include the following:

- a) A schedule for completion of all activities and submission of a final Groundwater Investigation and Characterization Report.
- b) A description of proposed actions including drilling methods, analytical methods, sampling locations, and purging and sampling methods.
- c) The location of existing monitoring wells and the proposed location of additional monitoring wells needed to characterize nutrient concentrations and their lateral and vertical extent in groundwater.
- d) Contingencies for collection of additional samples.
- e) Sufficient scope to meet the objectives of assessing nutrient loading from surface sources to groundwater and the contribution of groundwater to the nutrient loading and nutrient concentrations in Rainbow Creek
- f) Consideration of the following elements or factors:
 - i) Nutrient mass loading to groundwater in the fractured rock aquifer and the alluvial deposits aquifer⁹ from septic systems, deep percolation of applied irrigation water, and any other sources
 - ii) Base flow contribution to Rainbow Creek from the fractured rock aquifer and the alluvial deposits aquifer
 - iii) Mass balance of nutrients in the fractured rock aquifer and alluvial deposits aquifer (nutrient mass loading to groundwater, removals from the groundwater system including denitrification, plant uptake, and groundwater discharge, and change in the load and concentration of nutrients in groundwater;

The County of San Diego shall implement the workplan within sixty (60) days after submission of the workplan, unless otherwise directed in writing by the Regional Board. Before beginning these activities the County shall notify the Regional Board of the intent to initiate the proposed actions included in the workplan submitted; and comply with any conditions set by the Regional Board.

8. Replace Attachment A To Tentative Resolution No. R9-2005-0036, Draft Basin Plan Amendment, Section B.4, Page 12 and 13, County of San Diego Actions as follows:

Submit Groundwater Investigation and Characterization Report

The County of San Diego shall, on a schedule agreed to in writing by the Regional Board, submit a Groundwater Investigation and Characterization Report containing a technical analysis and interpretation of the data to assess the contribution of groundwater to the nutrient loading and concentrations in Rainbow Creek. ~~of the following elements.~~ The report shall meet the objectives and address the considerations described in the Groundwater Investigation and Characterization Workplan. The report shall also present recommendations to refine assumptions, resolve uncertainties, and improve the scientific foundation of the TMDL with regard to quantifying groundwater nutrient loading to Rainbow Creek.

- ~~a. Nutrient loading to groundwater from Rainbow Creek watershed land use activities;~~
- ~~b. Nutrient mass loading to groundwater in the fractured rock aquifer and the alluvial deposits aquifer from septic systems, deep percolation of applied irrigation water, and any other sources;~~
- ~~c. Base flow contribution to Rainbow Creek from the fractured rock aquifer and the alluvial deposits aquifer;~~
- ~~d. Concentration of nutrients in base flow discharged to Rainbow Creek from the fractured rock aquifer and alluvial deposits aquifer;~~
- ~~e. Fate and transport characteristics of nutrients in the fractured rock aquifer and alluvial deposits aquifer;~~
- ~~f. Mass balance of nutrients in the fractured rock aquifer and alluvial deposits aquifer (nutrient mass loading to groundwater, removals from the groundwater system including denitrification, plant uptake, and groundwater discharge, and change in the load and concentration of nutrients in groundwater);~~
- ~~g. The location of existing monitoring wells and the proposed location of additional monitoring wells needed to characterize nutrient concentrations and their lateral and vertical extent in groundwater during the course of TMDL implementation. Methods for purging and sampling monitoring wells to provide representative samples for nutrients should be described; and~~
- ~~h. Field methodologies used for drilling, sampling, and other associated activities.~~

9. Replace Attachment A To Tentative Resolution No. R9-2005-0036, Draft Basin Plan Amendment, Section C.1, Page 13, County of San Diego Nutrient Reduction And Management Plan as follows:

1. NPS Nutrient Reduction and Management Plan (NRMP)

The [A NRMP for the Rainbow Creek watershed](#) shall describe the activities the County of San Diego ~~will~~ could undertake to oversee discharger efforts to reduce nutrients in the runoff or groundwater discharges from new and existing (1) commercial nurseries; (2) agricultural fields; (3) orchards; (4) parks; (5) residential area; (6) urban areas; and; (7) septic tank disposal system land uses (hereinafter referred to as key nutrient sources). The [A NRMP](#) ~~shall~~ should include the following elements as provided in items 2 through 17 below or alternative or additional elements equivalent to those described that would result in equivalent protection from, or prevention of, nutrient discharges to Rainbow Creek.

- ~~a. Legal authority~~
- ~~b. General Plan modification~~
- ~~c. Development project approval process~~
- ~~d. CEQA reviews~~
- ~~e. Pollution prevention~~
- ~~f. Source identification~~
- ~~g. Management Practice (MP) implementation~~
- ~~h. Inspection of nutrient sources~~
- ~~i. Enforcement of nutrient load reductions required under this TMDL~~

- ~~j. Reporting of non-compliant sites~~
- ~~k. Monitoring to assess compliance with nutrient load reductions~~
- ~~l. Groundwater investigation and characterization~~
- ~~m. Community education and outreach~~
- ~~n. Seek financial assistance~~
- ~~o. NRMP effectiveness~~
- ~~p. a. NRMP Annual Report~~

2. Legal Authority

The County of San Diego ~~shall~~ should review its legal authority ~~to ensure that it is adequate~~ and evaluate its adequacy to mandate compliance with the nutrient load reductions specified in this TMDL through ordinance, statute, permit, contract or similar means. ~~This legal authority must~~ The County, at a minimum, ~~authorize the County to~~ shall-should evaluate its authority to:

- a. Control the discharge of nutrients from nonpoint sources; and
- b. Prohibit discharges of nutrients which cause or contribute to exceedances of the nutrient load reductions specified in this TMDL or nutrient water quality objectives.

Alternatively the County of San Diego ~~shall~~ may certify that its existing legal authority is adequate to mandate compliance with the nutrient load reductions specified in this TMDL and prevent increases in nutrient loading to Rainbow Creek.

3. General Plan Modification

The County of San Diego ~~shall~~ should evaluate the adequacy of ~~modify, its~~ General Plan ~~as necessary~~ to ensure that future land use and zoning decisions do not result in an increase in the nutrient loading to Rainbow Creek. The County shall should also describe the steps it will take to modify the General Plan as necessary. Alternatively the County of San Diego ~~shall~~ may certify that its existing General Plan is adequate to prevent an increase in nutrient loading to Rainbow Creek.

4. Modify Development Project Approval Process

The County of San Diego ~~shall~~ should evaluate the adequacy of ~~modify~~ its development project approval / permitting process as necessary to ensure that discharges from proposed developments in the Rainbow Creek watershed will comply with the nutrients load reductions specified in this TMDL and ensure that nutrient water quality objectives are not exceeded. The County's evaluation ~~shall~~ should consider the need to ensure that all development in Rainbow Creek watershed will be in compliance with County storm water ordinances, permits, and all other applicable ordinances and requirements. The County shall should also describe the steps it will take to modify the development project approval / permitting process as necessary. Alternatively the County of San Diego ~~shall~~ may certify that its project approval / permitting process is adequate to ensure that discharges from proposed developments in the Rainbow Creek watershed will comply with the nutrients load reductions specified in this TMDL and ensure that nutrient water quality objectives are not exceeded.

5. CEQA Reviews

The County of San Diego ~~shall review and~~ should evaluate the adequacy of ~~of~~ revise as necessary its environmental review process pursuant to CEQA to ensure that new development in the Rainbow Creek watershed does not contribute to exceedances of the nutrient load allocations specified in this TMDL or violations of the nutrient water quality objective. For example, diligent performance of environmental review under CEQA and requirements for mitigation of the adverse environmental consequences to water quality of new development and detrimental agricultural practices can significantly reduce nutrient loading to Rainbow Creek. The County's evaluation shall ~~shall~~ consider the need to aggressively review proposed projects that have the potential to contribute nitrogen and phosphorus to the Rainbow Creek watershed and require appropriate mitigation. The County shall should also describe the steps it will take to revise the development project approval / permitting process as necessary. Alternatively the County of San Diego ~~shall~~ may certify that its environmental review process pursuant to CEQA is adequate to ensure that new development in the Rainbow Creek watershed does not contribute to exceedances of the nutrient load allocations specified in this TMDL or violations of the nutrient water quality objective.

6. Pollution Prevention (Nutrients)

The County of San Diego ~~shall~~ should describe the steps it will take to implement pollution prevention¹ methods for nutrients at sites owned by the County and ~~shall~~ require its use by owners or operators of nutrient sources, where appropriate.

7. Source Identification (Nutrients)

The County of San Diego ~~shall~~ should describe the steps it will take to develop and update annually an inventory of the individual nutrient sources within the residential, urban, commercial nurseries; agricultural fields; orchards; parks; septic tank disposal system category of land uses. The use of an automated database system, such as Geographical Information System (GIS) is highly recommended.

8. Threat to Water Quality Prioritization (Nutrients)

~~To establish priorities for inspection and oversight activities, the County~~ The County of San Diego ~~shall~~ should describe the steps it will take to establish priorities for inspection and oversight activities. ~~prioritize each inventory in item 7 above by threat to water quality and update it annually.~~ Each individual nutrient source in each nonpoint source category should be classified as high, medium, or low threat to water quality. The inventory should include the following minimum information for each site: name; address; SIC codes as appropriate which best reflects the type of site, a narrative description characterizing the nutrient waste generated and the potential for nutrient discharges to Rainbow Creek.

9. MP Implementation (Nutrients)

The County of San Diego ~~shall~~ should describe the steps it will take to:

¹ Pollution Prevention is defined as practices and processes that reduce or eliminate the generation of pollutants, in contrast to source control, treatment, or disposal.

- a. Designate a set of minimum MMs / MPs ² for the high, medium, and low threat to water quality nutrient sources identified in item 7 above. The designated minimum MPs for the high threat to water quality nutrient sources should be site and source specific as appropriate.
- b. Establish a time line for installation of the designated minimum MPs at each nutrient source within its jurisdiction. If particular minimum MPs are infeasible for any specific site/source the county of San Diego ~~shall~~ should describe the steps it will take to require the implementation of other equivalent MPs.

10. Inspection of Sites and Sources (Nutrients)

The County of San Diego ~~shall~~ should describe the steps it will take to inspect high priority sites and sources. ~~The County shall conduct site inspections~~ for compliance with its ordinances and permits as well as nutrient load reductions required under this TMDL. Inspections should include review of MP implementation plans and effectiveness. ~~Based upon site inspection findings, The County shall~~ should also describe the steps it will take to implement all ~~inspection follow-up actions,~~ including enforcement actions, as necessary to obtain discharger compliance in implementing MPs. ~~The County shall follow up with appropriate enforcement action as necessary.~~

11. Enforcement of Sites and Sources (Nutrients)

The County of San Diego ~~shall~~ should describe the steps it will take to enforce its ordinances, statutes, permits, and contracts as necessary to attain compliance with the nutrient load reductions specified in this TMDL.

12. Reporting of Non-compliant Sites (Nutrients)

The County of San Diego ~~shall~~ should describe the steps it will take to provide oral notification to the Regional Board of non-compliant sites that are determined to be recalcitrant in implementing MPs or attaining compliance with nutrient load reductions required under this TMDL within 24 hours of the discovery of noncompliance. ~~This The notification process should also include procedures for a follow-up shall be followed up by a written report to be submitted to the Regional Board within 5 days of the incidence of non-compliance.~~

13. Monitoring to Assess Compliance With Nutrient Load Reductions

The County of San Diego ~~shall~~ should describe the steps it will take to conduct, or require nutrient sites or sources to conduct, a monitoring program to assess compliance of runoff or groundwater discharges with the load reductions from each of the land use

² In determining appropriate MPs the County of San Diego is encouraged to consult the State Water Resources Control Board's California Nonpoint Source Encyclopedia (2004) (<http://www.waterboards.ca.gov/nps/encyclopedia.html>) ~~http://www.swrcb.ca.gov/nps/encyclopedia.html~~). This publication contains extensive information on nutrient reduction management measures (MMs) and management practices (MPs) applicable to the NPS land use activities in the Rainbow Creek watershed. The County is also encouraged to consult the Regional Board's Watershed Management Approach for the San Diego Region, Nonpoint Source (<http://www.waterboards.ca.gov/sandiego/programs/wmc.html>) ~~http://www.swrcb.ca.gov/rwqcb9/programs/wmc.html~~ for additional information on management measures.

categories assigned a load reduction. This can be accomplished by placing sampling stations at strategic nodes that would monitor nutrient discharges from individual sources of a common land use category.

14. Community Education and Outreach

The County of San Diego ~~shall~~ should describe the steps it will take to develop a focused educational programs to raise community awareness of the nutrient impairment problem, promote pollution prevention, and increase the use of applicable management measures and practices where needed to control and reduce nutrient discharges to Rainbow Creek. Public education, outreach, and training programs should involve applicable user groups and the community³.

15. Seek Financial Assistance

The County of San Diego is encouraged to seek grant funding⁴ for projects to implement the Rainbow Creek nutrient TMDLs, particularly those that can achieve quantifiable nutrient load reductions consistent with the specific nutrient TMDL load allocations.

16. Nutrient Reduction and Management Plan (NRMP) Effectiveness

The County of San Diego ~~shall~~ should describe the steps it will take to, ~~as part of the NRMP, to~~ develop a long-term strategy for assessing the effectiveness of the NRMP. The long-term assessment strategy should identify specific direct and indirect measurements that the County will use to track the long-term progress towards achieving the nutrient load reductions required under this TMDL. Methods used for assessing effectiveness should include the following or their equivalent: surveys, pollutant loading estimations, and receiving water quality monitoring. The long-term strategy shall also discuss the role of monitoring data in substantiating or refining the assessment.

17. Nutrient Reduction and Management Plan (NRMP) Annual Report

The County of San Diego ~~shall~~ should describe the steps it will take to submit an annual NRMP report to the Regional Board by January 31 of each year following USEPA approval of this TMDL. The reporting period for this annual report ~~shall~~ should be the previous fiscal year. For example, the report submitted January 31, 2006 ~~shall~~ would cover the reporting period July 1, 2004 to June 30, 2005. The Report ~~shall~~ should be incorporated in the annual Jurisdictional URMP Annual Report and the Watershed Specific URMP Annual Reports under the County's MS4 NPDES Permit. ~~The report shall~~ and include the following information:

³ Consideration should be given to expanding the County of San Diego's ongoing community and education outreach program under the County's MS4 NPDES Storm Water Permit to address the Rainbow Creek nutrient impairment problem. Additional suggestions for the information to be included in pollution prevention and education programs is contained in the State Water Resources Control Board's *California Nonpoint Source Encyclopedia* (2004)
(<http://www.waterboards.ca.gov/nps/encyclopedia.html>~~http://www.swrcb.ca.gov/nps/encyclopedia.html~~).

⁴ Information on available grant funds is contained in the in the State Water Resources Control Board's *California Nonpoint Source Encyclopedia* (2004)
(<http://www.waterboards.ca.gov/nps/encyclopedia.html>~~http://www.swrcb.ca.gov/nps/encyclopedia.html~~).

- a. Comprehensive description of all activities conducted by the County of San Diego to oversee implementation of the NRMP.
- b. An accounting of all: inspections conducted; enforcement actions taken; and education efforts conducted.
- c. An assessment of whether actions to implement designated minimum MPs at each nutrient source were actually carried out by dischargers.
- d. An assessment of the compliance of runoff or groundwater discharges with the load reductions from each of the land use categories assigned a load reduction.
- e. Identification of water quality improvements or degradation in Rainbow Creek with regard to attainment of the nutrient water quality objectives.
- f. An evaluation of the effectiveness of the NRMP in achieving the nutrient load reductions required under this TMDL.

10. Modify Attachment A To Tentative Resolution No. R9-2005-0036, Draft Basin Plan Amendment, TMDL Implementation Monitoring Plan, Page 20 as follows:

TMDL Implementation Monitoring Plan

The necessary actions to monitor TMDL implementation are described in Section 10 of the *Technical Report for Total Nitrogen and Total Phosphorus Total Maximum Daily Loads (TMDLs) in Rainbow Creek*, dated ~~October 15, 2004~~ January 27, 2005 and listed below.

11. Modify Attachment A To Tentative Resolution No. R9-2005-0036, Draft Basin Plan Amendment, TMDL Implementation Monitoring Plan, Regional Board Actions, Page 20 as follows:

A.1 Issue Order to Submit Monitoring Plan to Caltrans and County of San Diego

The Regional Board shall issue an Order to Caltrans under CWC §13383 and a [Governmental Water Quality Investigation Request](#) Order to the County of San Diego under CWC §13225, to prepare and submit an Implementation Monitoring Plan containing the elements described in **Section C. Implementation Monitoring Plan Elements** below. The Regional Board may amend this order at any time to include other nutrient dischargers in the Rainbow Creek watershed on a case-by case basis.

A.2 Issue Order to Implement Monitoring Plan to Caltrans and County of San Diego

Upon concurrence with the County of San Diego's and Caltrans' Implementation Monitoring Plan the Regional Board shall issue an Order to Caltrans under CWC § 13383 and ~~an~~ a [Governmental Water Quality Investigation Request](#) Order to the County of San Diego under CWC § 13225, to implement monitoring. The Regional Board may amend this order at any time to include other nutrient dischargers in the Rainbow Creek watershed on a case-by case basis

12. Basin Plan Amendment, Technical Report, and Appendices.

The word “draft” will be deleted from the final Basin Plan Amendment, Technical Report, and Appendices when in reference to the Basin Plan Resolution or Amendment, Technical Report, or Appendices.